



## INTERNATIONAL CIVIL AVIATION ORGANIZATION

**Fourth meeting of the AFI Volcanic Ash Exercises Steering Group  
(AFI VOLCEX/SG4)***(Virtual, 1 April 2025)***Agenda Item 3.2: Planning for future ICAO volcanic ash exercises in the AFI region****WP3.2C AFI 2025 Exercise Objectives and Scenario planning***(Presented by the Secretariat)*

SUMMARY
<p>This paper provides an update on the objectives of the volcanic ash exercises conducted in 2021 and 2023 and propose objectives for the 2025 exercise. Additionally, it presents an update on the planning scenario.</p> <p>Action by the meeting in paragraph 3</p>
<p><b>REFERENCE(S):</b></p> <ul style="list-style-type: none"><li>▪ Doc 9766 Handbook on the IAVW</li><li>▪ AFI VA Exercises Directive for Exercise VOLCEX 21-01 Rev0.1</li><li>▪ AFI VAA Exercises Operational Instructions VOLCEX OPINS Rev0.1</li><li>▪ Terms of Reference of the AFI VOLCEX Steering Group</li></ul>
<p><b>Related ICAO Strategic Objective(s):</b></p> <ul style="list-style-type: none"><li>• <b>A</b> – <i>Safety</i>, <b>B</b> – <i>Air Navigation Capacity and Efficiency</i></li></ul>

**1. INTRODUCTION**

- 1.1. As per ICAO Doc 9766, the volcanic ash exercise aims to enhance aviation safety, regularity, and efficiency during volcanic eruptions by demonstrating the provision and exchange of volcanic ash information for flexible airspace management, situational awareness, collaborative decision-making, and optimized flight trajectory planning.
- 1.2. In particular, the exercise aims to demonstrate the practice of applicable global and regional procedures related to volcanic activity and volcanic ash, including:
  - a) Distribution of alerts (e.g., VONA);
  - b) Distribution of AIS and MET messages (e.g., VAA/VAG, SIGMET, NOTAM, AIREP);
  - c) Responses by ATC, ATFM and aircraft operators (e.g., safety risk assessments, tactical re-routes); and
  - d) Enhanced situational awareness and CDM (e.g., via a teleconference/Webex)
- 1.3. The exercise must be planned and conducted in such a way as to avoid any adverse effect on the performance of the aviation system while ensuring the acquisition of useful experience and the collection of relevant information.

## 2. DISCUSSION

### *Exercise Objectives*

- 2.1 In 2021, the first exercise was led by Cabo Verde with the following objectives:
  - a) coordination between the key stakeholders involved in the provision of AIS, ATS and MET information to users;
  - b) Communication between the key stakeholders involved in the provision of volcanic ash information;
  - c) Evaluation of the reactivity of the actors and the speed of execution of assigned tasks.
- 2.2 For this first edition, the AIS and MET messages were exchanged through Intranet.
- 2.3 In 2023, considering the lessons learned from the first exercise conducted in 2021, the second exercise was conducted under the following main objectives:
  - Demonstrate coordination procedures between all participating parties (ANSPs; ATM; Centres ; AIS ; VO ; VAACs ; MWOs ; SAR ; Military ; Users).
  - Timely distribution of messages including AIS and MET VONA; VAA/VAG; SIGMET; NOTAM; AIREP messages.
  - Evaluate the effectiveness of the team in managing a contingency related to volcanic ash.
  - Check the effectiveness of agreements between neighboring Centres/States.
  - Demonstrate information timely sharing via telecommunications network and internet-based services.
  - Demonstrate transmission of air-reports on volcanic ash in accordance with Annex 3 (Aircraft -> ACC -> MWO ->VAAC).
- 2.4 For the third volcanic ash exercise scheduled for November 2025, taking into account the lessons learned from the second exercise, the objectives of the third edition are proposed as follows:
  - Timely distribution of messages including AIS and MET VONA; VAA/VAG; SIGMET; NOTAM; AIREP messages.
  - Collect and exchange of special air-reports;
  - Effective application of phraseology provisions;
  - Implementation of the roles of key stakeholders, including SAR entities;
  - Coordination procedures between all participating parties (ANSPs; ATM; Centres; AIS; VO; VAACs ; MWOs ; SAR ; Military ; Users);
  - Activation and management of contingency plans related to volcanic ash;
  - Implementation of agreements between neighboring States regarding the management of volcanic ash events; and
  - Timely sharing via telecommunications network and internet-based services.

***Planning Scenario***

- 2.5 Planning meetings are conducted at least three months before the next exercise and are chaired by the Exercise Leader. Their primary objectives are to:
- a) Determine the specific date(s) and time(s) of the exercise;
  - b) Negotiate the aims and objectives of the exercise;
  - c) Design a scenario to meet the objectives of the exercise;
  - d) Identify participating agencies and Directing Staff responsibilities; and
  - e) Exchange information of interest for the exercise community.
- 2.6 The Planning Meeting should typically be hosted by one of the participating agencies. Delegates should include key personnel authorized to make decisions on behalf of their organization or area of expertise.
- 2.7 The Exercise Leader, in coordination with the host agency, should develop the Planning Meeting agenda and communicate the meeting format (virtual or in-person). Delegates may propose additional agenda items as needed.
- 2.8 Delegates attending the Planning Meeting shall be prepared to:
- a) Present ideas for new exercise and develop a complete scenario for the exercise;
  - b) Propose dates for the next exercise;
  - c) Identify Directing Staff.
- 2.9 The exercise leader may designate a participant to draft the minutes, which must be distributed to the relevant organizations within four weeks after the planning meeting.

**3. ACTIONS BY THE MEETING**

- 3.1. The meeting is invited to:
- a) Note the information in this paper; and
  - b) Provide guidance as appropriate.

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